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|--|-------------|----------------------|------------------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
| 10/672,434   | 09/29/2003  | Akihiro Koga         | 243396US2SRD                 | 8505             |
| 22850 7590 04/04/2007<br>OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | EXAMINER<br>JERABEK, KELLY L |                  |
|  |             |                      | ART UNIT                     | PAPER NUMBER     |
|  |             |                      | 2622                         |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE   |             | NOTIFICATION DATE    | DELIVERY MODE                |                  |
| 3 MONTHS   |             | 04/04/2007           | ELECTRONIC                   |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/04/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

Application No.

10/672,434

Applicant(s)

KOGA ET AL.

Examiner

Kelly L. Jerabek

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 4-5 and 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/26/2007.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Drawings***

Figures 10 and 11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected

drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiba et al. US 2002/0036443 in view of Tadao JP 2001-069383.**

Re claims 1 and 6, Akiba discloses a camera unit (endoscope) and a method of manufacturing a camera unit (page 4, paragraph 86) comprising: a substrate (glass plate 13,15) including at least an electrode region (12, 14) and an image pickup device region (17) (page 5, paragraphs 88-93; page 15, paragraphs 205-208; figures 3A-3C, 4A-4C, 12A); a driving electrode portion (12) disposed on the electrode region and

including a plurality of electrodes arranged along a predetermined direction (page 5, paragraphs 88-93; figures 3A-3C, 4A-4C, 12A); an image pickup device (18 CCD) disposed on the image pickup device region (17) (page 15, paragraphs 205-208; figure 12A); stationary unit attaching portions disposed at positions surrounding the image pickup device region (18 CCD); a stationary unit frame (stator frame 3A) that is attached to stationary unit attaching portions and extended in a predetermined direction (figures 3A-3C, 4A-4C, 12A; page 5, paragraphs 88-94); and movable units (2A, 2B) that are reciprocatingly driven in the stationary unit frame (stator frame 3A) in the predetermined direction by the driving electrode portion (12) and a support lens (6) respectively (page 5, paragraph 95-page 6, paragraph 102), wherein the electrode region (12,14) is fixed on a side of the stationary unit frame (3A) inwardly, and the image pickup device region (17,18) is fixed on an end surface of the stationary unit frame (3A) toward the movable units (2A, 2B) (figures 3A-3C, 4A-4C, 12A). However, although the Akiba reference discloses all of the above limitations it fails to specifically disclose a flexible substrate that includes an electrode region and an image pickup device region formed on a same surface wherein the flexible substrate is bent along a bending portion between the electrode region and the image pickup device region.

Tadao discloses a camera unit comprising a flexible substrate with flexibility in which a function print board (2-4) having an electrical function and an imaging device print board (6) are connected via a flexible print wiring board (8) provided on the same surface side, wherein the function print board (2-4) is fixed to the side surface of the stator frame (10) in the state where it faces the lens side (10a) (figure 5, paragraphs 22-

26). Therefore it would have been obvious for one skilled in the art to have been motivated to connect the substrate provided with an electrode region and the substrate with an imaging device region disclosed by Akiba with a flexible print wiring board as disclosed by Tadao so that the substrate provided with the electrode region and the imaging device region are provided on the same surface side. Doing so would provide a means for reducing the size of the camera and thus providing a more compact camera.

Re claim 2, Tadao further states that the flexible substrate (2-4, 6, 8) further comprises an electrode part mounting region (2-4) disposed adjacent to the image pickup device region (6) and bent along a bending portion (8) between the image pickup device region (6) and the electrode part mounting region (2-4), and the electrode part mounting region (2-4) is fixed on a side of the stationary unit frame (10) inwardly thereof (figure 5, paragraphs 22-26).

Re claim 3, Tadao states that the flexible substrate (2-4, 6) includes printed circuit boards that are cutoff at a bending portion (8) (figure 5). Tadao fails to specifically state that the printed circuit boards include a resin sheet and metal leads. However, the Examiner takes **Official Notice** that it is well known for printed circuit boards comprise a resin sheet and metal leads. Therefore, it would have been obvious for one skilled in the art to have been motivated to include printed circuit boards that are

composed of a resin sheet and metal leads. Doing so would provide a means for protecting fragile circuit elements.

### ***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is (571) 272-7312. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for submitting all Official communications is (571) 273-8300. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ



TUAN HO  
PRIMARY EXAMINER